

Report on the Washington Retirement Systems

2001

*Results of the 2001
Actuarial Valuations*

By the Office
of the State Actuary

*Prepared In:
September 2002*



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WASHINGTON STATE LEGISLATURE
Office of the State Actuary

September 2002

To the Stakeholders of the Washington Retirement Systems:

The state's retirement systems represent a large financial commitment for public agencies, for their employees, and for Washington taxpayers. The funding of retirement benefits is inherently complex but it is important for members, the public and legislators to have information available to assess the funding and health of the systems. Each year this office develops information on funding and the funded status of each of the systems in an "Actuarial Valuation." This study is performed according to accepted actuarial practices and statutorily-prescribed methods.

This "Report on the Washington Retirement Systems" provides the results of the latest actuarial valuations for the state's larger retirement systems. Other information is included to aid in understanding the operations and dynamics of the systems.

An actuarial valuation requires information about membership and assets, and a set of assumptions about future events. The Actuary's office does not maintain this data, but relies on other state agencies to supply the information necessary to the process. Membership data is provided by the Department of Retirement Systems. Asset information is supplied by the State Investment Board and assumptions are adopted by the Pension Funding Council. A chart of how these and several other agencies impact the retirement systems is printed at the back of this report.

The 2001 valuation initiated a minor change in the yearly time periods used to determine valuation results. Now all systems are reported on an annual basis running from October 1st to September 30th. To make this transition, TRS asset data reflects a fifteen-month period while all other systems are based on a nine-month period.

You may receive additional copies of this Report by contacting the Office of the State Actuary.

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System Membership

Overview

The state administers eight retirement **systems** for state and local public employees. Retirement system membership is determined according to the participant's occupation and employer. Employees covered by each system are defined in separate chapters of the Revised Code of Washington (RCW).

The state also administers benefits for volunteer fire fighters and two small judicial systems. The judicial systems are closed to new members. Judges hired after June 30, 1988 are members of PERS 2.

The five largest retirement systems and a general description of their membership are listed below.

All of these systems are currently comprised of two or three benefit **plans**. Plans are tiers of benefits offered to employees first hired on or after a specified date. Beginning January 1, 2003, a Plan 2 set of benefits will become effective for new hires in the State Patrol system. The Public Employee's Retirement System (PERS) initiated a Plan 3 tier of benefits March 1, 2002 for state employees and institutions of higher education and September 1, 2002 for local agencies.

Public Employees' Retirement System (PERS) (Chapter 41.40 RCW): State employees; employees of all counties and most cities (the exceptions are Tacoma, Seattle, and Spokane); non-teaching employees of institutions of higher learning and community colleges; employees of ports, service districts, the Washington Public Power Supply System and public utility districts. Judges first elected or appointed after June 30, 1988 are also included.

Teachers' Retirement System (TRS) (Chapter 41.32 RCW): Certificated teachers; administrators; and educational staff associates.

School Employees' Retirement System (SERS) (Chapter 41.35 RCW): Classified school district employees.

Law Enforcement and Fire Fighter's Retirement System (LEOFF) (Chapter 41.26 RCW): Fire fighters; law enforcement officers including sheriffs; university, port and city police officers.

Washington State Patrol Retirement System (WSP) (Chapter 43.43 RCW): Commissioned officers of the Washington State Patrol.

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Some public employees are members of systems not administered by the state. These include faculty and some administrators at state colleges and universities. This group participates in defined contribution programs administered by individual institutions. Collectively, they are known as the Higher Education Retirement Plan. Information on Higher Education plans is not included in this report.

The cities of Seattle, Tacoma and Spokane maintain their own retirement systems. All municipal employees belong to the city systems, except police and fire fighters. Uniformed employees are members of the statewide LEOFF system.

By far the largest retirement system administered by the state is PERS. Public employees are mandated into PERS unless specifically required to participate in another system.

In the past, membership in the retirement plans has been determined by when a member is first hired for public employment. Plan 1 tiers were closed to new members when the Plan 2 tiers opened. When the Plans 3 were created in TRS and SERS, their Plans 2 were closed to new members. Beginning in 2002, the PERS system will have two plans open to new members at the same time. Newly-hired employees will have the option of becoming members of Plan 2 or Plan 3. The following table shows the relevant dates for each current plan and one future plan, WSP 2.

Plan	Plan Status	
	Opened	Closed
PERS 1	10/1/47	9/30/77
TRS 1	3/1/38	9/30/77
LEOFF 1	3/1/70	9/30/77
WSP 1	6/12/47	12/31/02
PERS 2	10/1/77	On-going
TRS 2	10/1/77	6/30/96
LEOFF 2	10/1/77	On-going
SERS 2	9/1/00	9/1/00
WSP 2	1/1/03	On-going
TRS 3	7/1/96	On-going
SERS 3	9/1/00	On-going
PERS 3	3/1/02 or 9/1/02 ¹	On-going

¹ 3/1/02 for state employees; 9/1/02 for local government employees.

2001 Total Membership By Plan & Status					
Plan	Actives	Annuitants	Total ¹	% of All Actives	% of All Annuitants
PERS 1	23,981	53,538	77,519	8.0%	49.9%
PERS 2	128,955	8,651	137,606	42.8%	8.1%
TRS 1	13,971	32,195	46,166	4.6%	30.0%
TRS 2	8,056	709	8,765	2.7%	0.7%
TRS 3	44,193	203	44,396	14.7%	0.2%
SERS 2	24,063	191	24,254	8.0%	0.2%
SERS 3	24,284	78	24,362	8.1%	0.1%
LEOFF 1	1,315	7,894	9,209	0.4%	7.4%
LEOFF 2	13,585	184	13,769	4.5%	0.2%
WSP	1,027	696	1,723	0.3%	0.6%
Others ²	17,821	2,923	20,744	5.9%	2.7%
Total	301,251	107,262	408,513	100.0%	100.0%

¹ Excludes terminated vested members in all systems. Excludes terminated vested and disabled members in WSP.

² Includes Volunteer Fire, Judicial and Judges.

Active members are those who continue to accrue benefits by virtue of employment in a position covered by one of the Washington retirement systems.

Annuitants are individuals receiving either retirement, disability or survivor benefits.

Terminated-vested members are individuals who have left active membership but have earned enough service credit to retain the right to a retirement benefit upon reaching retirement age. They may also return to active membership in the future and earn additional credit.

2001 Active Membership by Employer

Washington retirement system members are employed by over 1,200 individual state and local public entities.

The tables on the following page show the distribution of membership among these employers for the five largest retirement systems.

Active Membership By Employer & Plan						
Employer	Total by Employer	PERS		TRS		
		<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 3</i>
State Agencies	59,481	9,054	49,224	113	8	55
Higher Education	18,386	2,248	15,970	59	6	6
Comm. Colleges	5,820	630	4,851	237	49	53
K-12	116,598	4,418	0	13,496	7,936	43,906
Counties	29,452	3,019	23,712	0	0	0
County Sub Div.	15,552	1,557	13,995	0	0	0
First Class Cities	8,312	454	2,838	0	0	0
Other Cities	16,359	1,189	10,444	0	0	0
Ports	2,232	261	1,791	0	0	0
Ed. Service Dist.	1,898	97	0	66	57	173
Fire Districts	2,622	33	433	0	0	0
Public Utility Dist.	3,918	655	3,263	0	0	0
Water Districts	1,649	217	1,432	0	0	0
WPPSS	1,111	109	1,002	0	0	0
Unions	40	40	0	0	0	0
Total	283,430	23,981	128,955	13,971	8,056	44,193

Active Membership by Employer & Plan					
Employer	SERS		LEOFF		WSP
	Plan 2	Plan 3	Plan 1	Plan 2	
State Agencies	0	0	0	0	1,027
Higher Education	0	0	0	97	0
Comm. Colleges	0	0	0	0	0
K-12	23,313	23,529	0	0	0
Counties	0	0	192	2,529	0
County Sub Div.	0	0	0	0	0
First Class Cities	0	0	663	4,357	0
Other Cities	0	0	345	4,381	0
Ports	0	0	10	170	0
Ed. Service Dist.	750	755	0	0	0
Fire Districts	0	0	105	2,051	0
Public Utility Dist.	0	0	0	0	0
Water Districts	0	0	0	0	0
WPPSS	0	0	0	0	0
Unions	0	0	0	0	0
Total	24,063	24,284	1,315	13,585	1,027

Membership Status

Members join and leave the systems by a variety of means. Tracking this activity identifies trends in membership and the effect of legislative changes on the systems' demographic experience.

The sequential relationship of the 1, 2 and 3 plans creates differences in the composition of plan membership. The older Plan 1 systems contain more annuitants than active members. In the younger 2/3 Plans, the opposite is true.

No new members have entered the Plan 1 tiers since 1977. TRS 2 membership was closed in 1996 and SERS 2 was closed in 2000. Membership growth in these plans is comprised entirely of members who

qualified for membership through prior employment, left the system and have been rehired. In other plans, rehires are only a small percent of membership growth.

All retired members receive a benefit for life. Their benefit may continue after their death to a survivor or beneficiary. Whether a member leaves a beneficiary is determined either by the benefit payment option chosen at retirement or, in the case of the LEOFF 1 and WSP systems, by eligibility requirements defined in statute.

In the table below, new retirees are listed twice. In the "Active" portion of the table, new retirees include disability retirees and members who retire from active status. The "Annuitant" portion of the table includes the above, as well as members retiring from terminated vested status.

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2001 Membership Status							
	PERS		TRS			SERS	
	<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 3</i>	<i>Plan 2</i>	<i>Plan 3</i>
2000 Actives	25,833	126,428	17,222	8,356	38,280	25,714	22,011
Transfers	0	(78)	0	(126)	170	366	92
Hires/ Rehires (+)	464	13,221	288	622	9,106	594	3,970
New Retirees (-)	(1,628)	(462)	(3,076)	(146)	(86)	(144)	(75)
Deaths (-)	(44)	(116)	(32)	(15)	(20)	(28)	(10)
Terminations (-)	(644)	(10,038)	(431)	(635)	(3,257)	(2,439)	(1,704)
2001 Actives	23,981	128,955	13,971	8,056	44,193	24,063	24,284
2000 Annuitants	53,161	7,927	29,839	519	92	27	0
New Retirees (+)	1,830	824	3,337	200	106	163	78
Annuitant Deaths (-)	(1,689)	(130)	(1,161)	(14)	(1)	0	0
New Survivors (+)	247	31	187	4	7	2	0
Other (-)	(11)	(1)	(7)	0	(1)	(1)	0
2001 Annuitants	53,538	8,651	32,195	709	203	191	78
Ratio Actives to Annuitants	0.45	14.91	0.43	11.36	217.70	125.98	311.33

2001 Membership Status			
	LEOFF		WSP
	<i>Plan 1</i>	<i>Plan 2</i>	
2000 Actives	1,499	13,133	1,013
Transfers	0	0	0
Hires/ Rehires (+)	6	805	53
New Retirees (-)	(173)	(31)	(28)
Deaths (-)	(2)	(8)	0
Terminations (-)	(15)	(314)	(11)
2001 Actives	1,315	13,585	1,027
2000 Annuitants	7,780	143	672
New Retirees (+)	186	42	29
Annuitant Deaths (-)	(117)	(2)	(11)
New Survivors (+)	47	2	7
Other (-)	(2)	(1)	(1)
2001 Annuitants	7,894	184	696
Ratio Actives to Annuitants	0.17	73.83	1.48

Membership Demographics

Profile of Active Members: The number of Plan 1 members are decreasing each year through terminations and retirements. Not surprisingly, Plan 1 total salaries are also decreasing. However, due to annual salary increases, the total amount of salaries is decreasing at a slower rate than membership.

Total annual salaries in Plans 2/3 are growing due to three factors: salary increases, overall growth in system membership and new members replacing retiring Plan 1 members.

2001 Active Member Demographics							
	PERS		TRS			SERS	
	Plan 1	Plan 2	Plan 1	Plan 2	Plan 3	Plan 2	Plan 3
Number of Active Members	23,981	128,955	13,971	8,056	44,193	24,063	24,284
Percent Change from 2000	(7.2%)	2.0%	(18.9%)	(3.6%)	15.4%	(6.4%)	10.3%
Total Annual Salaries (millions)	\$ 1,085	\$ 5,249	\$ 800	\$ 391	\$ 1,958	\$ 486	\$ 518
Percent Change from 2000	(4.2%)	5.7%	(16.4%)	1.3%	18.2%	(7.6%)	6.6%
Averages:							
Current Age	54.0	43.4	53.9	47.8	40.0	46.5	45.1
Years of Service	20.7	8.1	23.2	10.6	7.6	6.9	7.0
Annual Salary	\$45,226	\$40,707	\$57,243	\$48,563	\$44,312	\$20,193	\$21,324
Percent Change from 2000	3.2%	3.7%	3.0%	5.0%	2.4%	(1.3%)	(3.4%)

2001 Active Member Demographics			
	LEOFF		WSP
	Plan 1	Plan 2	
Number of Active Members	1,315	13,585	1,027
Percent Change from 2000	(12.3%)	3.4%	1.4%
Total Annual Salaries (millions)	\$ 87	\$ 831	\$ 60
Percent Change from 2000	(8.4%)	6.5%	3.4%
Averages:			
Current Age	52.4	38.5	38.3
Years of Service	27.5	9.9	11.7
Annual Salary	\$65,959	\$61,139	\$58,633
Percent Change from 2000	4.2%	2.9%	1.5%

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Profile of Annuitants: The Plan 1 tiers produce the most new retirees each year, but because they already have significant numbers of retirees, the annual percentage increase is small. In Plan 2, members are just beginning to reach retirement eligibility. While the actual numbers of new retirees is less than Plan 1, the percentage increases are much higher.

PERS 2 shows the most retirees of the Plan 2 tier. This is due to the larger active membership and a higher percentage of members first hired after age-50. Only members hired at older ages have had time to reach the age-65 eligibility for normal retirement.

The current group of Plan 2 retirees do not represent what eventually will be the typical retiree. The benefits of current Plan 2 retirees come from short service, late-age hires who have retired at age-65 or older.

Retirement can have a different meaning in the Plan 3 systems than in Plans 1 or 2. In Plan 3, members can begin receiving distributions from their defined contribution account at any age if they have left employment. At this point the member may consider himself to be "retired." For purposes of this report, only those members who have begun receiving monthly payments from the defined benefit portion of Plan 3 are considered retired.

2001 Annuitant Demographics							
	PERS		TRS			SERS	
	Plan 1	Plan 2	Plan 1	Plan 2	Plan 3	Plan 2	Plan 3
Number of Annuitants	53,538	8,651	32,195	709	203	191	78
Percent Change from 2000	0.7%	9.1%	7.9%	36.6%	120.7%	607.4%	N/A
Total Annual Benefits (millions)	\$ 705	\$ 57	\$ 544	\$ 7	\$ 1	\$ 1	\$ 0
Percent Change from 2000	6.3%	16.3%	17.5%	40.0%	N/A	N/A	N/A
Averages:							
Current Age	73.1	69.6	70.6	67.8	60.6	65.6	62.2
Years of Service	20.8	11.8	25.8	12.8	15.5	14.6	15.5
Monthly Benefit	\$ 1,098	\$ 546	\$ 1,409	\$ 854	\$ 367	\$ 452	\$ 212
Percent Change from 2000	5.6%	5.6%	8.9%	10.5%	13.6%	(3.2%)	N/A

2001 Annuitant Demographics			
	LEOFF		WSP
	<i>Plan 1</i>	<i>Plan 2</i>	
Number of Annuitants	7,894	184	696
Percent Change from 2000	1.5%	28.7%	3.6%
Total Annual Benefits (millions)	\$ 248	\$ 2	\$ 22
Percent Change from 2000	5.5%	0.0%	10.0%
Averages:			
Current Age	64.1	60.4	63.3
Years of Service	22.3	13.3	28.3
Monthly Benefit	\$ 2,620	\$ 1,063	\$ 2,647
Percent Change from 2000	4.1%	15.4%	5.3%



Contributions

Overview

The retirement benefits provided by Washington's public employers are pre-funded by employer and employee contributions and investment earnings on those contributions. Money accumulates in the fund during members' working careers and is paid out in benefits when they retire.

This section describes the process by which contribution rates are determined. Later sections detail the costs of benefits and the accumulation of retirement assets.

Statutory Basis for Contribution Rates		
System	Employee	Employer/State
PERS 1 TRS 1	Set in statute at 6% of salary.	Balance of cost of benefits, equal to payment to amortize PERS 1 and TRS 1 unfunded liabilities plus Plan 2 normal cost.
LEOFF 1	Set in statute at 6% of salary. No contribution required when plan is fully funded.	Employer rate set in statute at 6%. No contribution required when plan is fully funded. State pays balance of cost of benefits.
WSP ¹	50% of the cost of benefits as determined by valuation, but no less than 2% of salary.	Balance of cost of benefits.
PERS 2	50% of the cost of PERS benefits as determined by valuation, less gain-sharing costs.	50% of the cost of benefits, plus additional payments to amortize PERS 1 unfunded liabilities and fund gain-sharing benefits.
TRS 2	No greater than the employer rate for Plans 2/3, less gain-sharing costs.	50% of the cost of benefits, plus additional payments to amortize TRS 1 unfunded liabilities and fund gain-sharing benefits.
SERS 2	50% of the cost of SERS benefits as determined by valuation, less gain-sharing costs.	50% of the cost of benefits, plus additional payments to amortize PERS 1 unfunded liabilities and fund gain-sharing benefits.
LEOFF 2	50% of the cost of benefits as determined by valuation.	Employer rate set in statute at 30% of benefit costs. State rate set in statute at 20% of benefit costs.
PERS 3 TRS 3 SERS 3	Employee does not contribute to the defined benefit plan, but contributes to the defined contribution benefit.	Same as Plan 2 rates.

¹Funding change implemented July 1, 2001.

The principle of pre-funded retirement benefits is to steadily put money into a fund during employees' working careers. This money is invested and its earnings added to the fund. The goal is to have "grown" enough money in the fund through contributions and investments that at retirement, the benefits members have earned will be fully funded. Contribution rates calculated by the valuation reflect a "best estimate" of the amount of contributions needed to accomplish this goal. The table on page 17 demonstrates this flow of funds into and out of the systems during 2001.

Contribution rates are expressed as percentages of pay. When these percentages are multiplied by active members' salaries and added to fund assets, the sum is expected to pay the projected cost of benefits. Because actual future costs are subject to some unknowns, such as inflation and investment return rates, arriving at a cost requires both statistical analysis and subjective decisions regarding economic and demographic assumptions.

The Basis of Contribution Rates

The basis for the contribution rate-setting process is contained in Chapter 41.45 RCW. Contribution rates are calculated every year by the State Actuary's Office in a special study called an actuarial valuation. Aspects of the valuation are closely prescribed by state law, Washington Administrative Code and professional actuarial standards. In general, contributions are determined either by a specific rate set in statute or by actuarial valuation. (See prior page.)

Retirement funding law identifies some factors to be included in the contribution rate calculation. One requirement is that the cost of any benefits enacted after the valuation rates are determined must be added to the rates beginning the next fiscal year

(September 1). This requirement often causes the rates actually charged to employers to differ from the rates arrived at through the valuation process.

The rate-setting process set in statute is based on the two-year biennial cycle. This approach is designed to allow state and local employers to budget a stable percent of salaries for retirement benefits during the ensuing biennium. Valuations are conducted every year, but only the results in odd-numbered years are used to determine contribution levels. Results of even-year valuations are used primarily to cost proposed legislation and track system experience.

Once odd-year rates are calculated, they are submitted to the Pension Funding Council (PFC) for official adoption. The Department of Retirement Systems is required to charge the adopted rates unless the Legislature enacts changes requiring a rate increase or decrease. In almost every biennium, benefit legislation is enacted that requires such adjustment. Adjusted rates become effective at the beginning of the fiscal year unless specified by the Legislature.

In addition to benefit changes, it is expected that actuarial changes will also occur. Shifts in membership demographics and economic gains and losses are recognized in every valuation, but only affect the rate-setting process every two years.

The actuarial reconciliation tables below show the degree to which employer and state contribution rates have been affected by legislation and actuarial factors. Negative changes indicate that gains and/or assumption changes have occurred that will cause contribution rates to be reduced. Positive changes indicate that losses have occurred, or plan improvements and/or assumption changes were made causing rates to increase.

**Actuarial Reconciliation of 2001 Contribution Rates
Employer and State Contribution Rates**

	<u>PERS</u>	<u>TRS</u>	<u>SERS</u>	<u>LEOFF 1¹</u>	<u>WSP</u>
2000 Valuation	1.63 %	2.38 %	1.22 %	0.00%	0.00%
Changes Resulting from Legislation	(0.53)%	(1.33)%	(0.26)%	0.00%	0.00%
Adjusted 2000 Valuation	1.10 %	1.05 %	0.96 %	0.00%	0.00%
Economic Gains and Losses	1.13 %	1.38 %	0.73 %	1.25%	3.05%
Demographic Gains and Losses	0.06 %	0.14 %	0.11 %	0.01%	0.00%
Other Gains and Losses	(0.24)%	(0.35)%	(0.06)%	0.25%	0.06%
2001 Valuation	2.05 %	2.22 %	1.74 %	0.00%	0.00%

¹ Only the effect on the LEOFF 1 UAAL rate is shown.

**Actuarial Reconciliation of 2001
Employer and State Contribution Rates To Plan 2 and Plan 3 Only**

	<u>PERS 2/3</u>	<u>TRS 2/3</u>	<u>SERS 2/3</u>	<u>LEOFF 2¹</u>
2000 Valuation	1.05 %	1.76 %	0.64 %	1.61%
Changes Resulting from Legislation	(0.40)%	(1.11)%	(0.13)%	0.14%
Adjusted 2000 Valuation	0.65 %	0.65 %	0.51 %	1.75%
Economic Gains and Losses	0.78 %	0.88 %	0.73 %	0.23%
Demographic Gains and Losses	0.04 %	0.10 %	0.11 %	0.00%
Other Gains and Losses	(0.06)%	(0.13)%	(0.25)%	0.04%
2001 Valuation	1.41 %	1.50 %	1.10 %	2.02%

¹ We have only shown the LEOFF 2 state contribution rate which is 20% of the cost.

The LEOFF 2 employer contribution rate is 30% of the cost.

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The two tables below show results of the actuarial valuations for the last four years. Valuation rates calculated in even-numbered years are used for tracking purposes only. In the last two bienniums however, the Legislature has enacted rate changes based on these off-year results.

Rates calculated in 2001 will establish base line contributions for the 2003-05 Biennium. Barring legislative action, these rates will provide the basis for contribution rates for the next two years.

Employer/State Valuation Contribution Rates						
	Plan		1998	1999	2000	2001
PERS	All	Employer	3.49%	3.21%	1.63%	2.05%
TRS	All	Employer	5.81%	5.38%	2.38%	2.22%
SERS	All	Employer	–	–	1.22%	1.74%
LEOFF	1	Employer	6.00%	0.00%	0.00%	0.00%
		State	0.00%	0.00%	0.00%	0.00%
LEOFF	2	Employer	3.22%	3.46%	2.41%	3.03%
		State	2.14%	2.31%	1.61%	2.02%
WSP		Employer	0.00%	0.00%	0.00%	0.00%

Employee Valuation Contribution Rates					
	Plan	1998	1999	2000	2001
PERS	1	6.00%	6.00%	6.00%	6.00%
	2	1.49%	1.70%	1.05%	1.41%
TRS	1	6.00%	6.00%	6.00%	6.00%
	2	1.71%	2.15%	1.29%	1.20%
SERS	2	–	–	0.46%	1.10%
LEOFF	1	6.00%	0.00%	0.00%	0.00%
	2	5.36%	5.77%	4.02%	5.05%
WSP		7.00%	7.00%	2.00%	2.00%

One aspect of the valuation rates which often causes confusion is that they are calculated in the year after the one for which data is collected. Hence, the 1999 valuation is conducted in 2000, the 2001 valuation in 2002. In addition, rates are usually not scheduled to go into effect immediately.

In the interval between the determination and effective date of rate changes, legislation is often enacted altering the rates actually charged to employers and employees. The rates shown below are the valuation rates, after they have been impacted by legislation.

Employer/State Contribution Rates Charged						
	<u>Plan</u>		<u>As of</u>			
			<u>5/1/00</u>	<u>9/1/00¹</u>	<u>7/1/01²</u>	<u>4/1/02</u>
PERS	All	Employer	3.58%	4.44%	1.54%	1.10%
TRS	All	Employer	6.03%	7.10%	2.75%	1.05%
SERS	All	Employer	–	4.44%	1.54%	0.96%
LEOFF	1	Employer	6.00%	0.00%	0.00%	0.00%
		State	0.00%	0.00%	0.00%	0.00%
LEOFF	2	Employer	3.25%	4.07%	2.70%	2.64%
		State	2.16%	2.71%	1.80%	1.75%
WSP		Employer	0.00%	0.00%	0.00%	0.00%

1 LEOFF rates were implemented July 1, 2000.

2 TRS and SERS rates were implemented September 1, 2001.

Employee Contribution Rates Charged					
	<u>Plan</u>	<u>As of</u>			
		<u>5/1/00</u>	<u>9/1/00¹</u>	<u>7/1/01²</u>	<u>4/1/02</u>
PERS	1	6.00%	6.00%	6.00%	6.00%
	2	1.54%	2.43%	0.88%	0.65%
TRS	1	6.00%	6.00%	6.00%	6.00%
	2	1.85%	3.01%	1.23%	0.15%
SERS	2	–	2.43%	0.88%	0.35%
LEOFF	1	6.00%	0.00%	0.00%	0.00%
	2	5.41%	6.78%	4.50%	4.39%
WSP		7.00%	3.00%	2.00%	2.00%

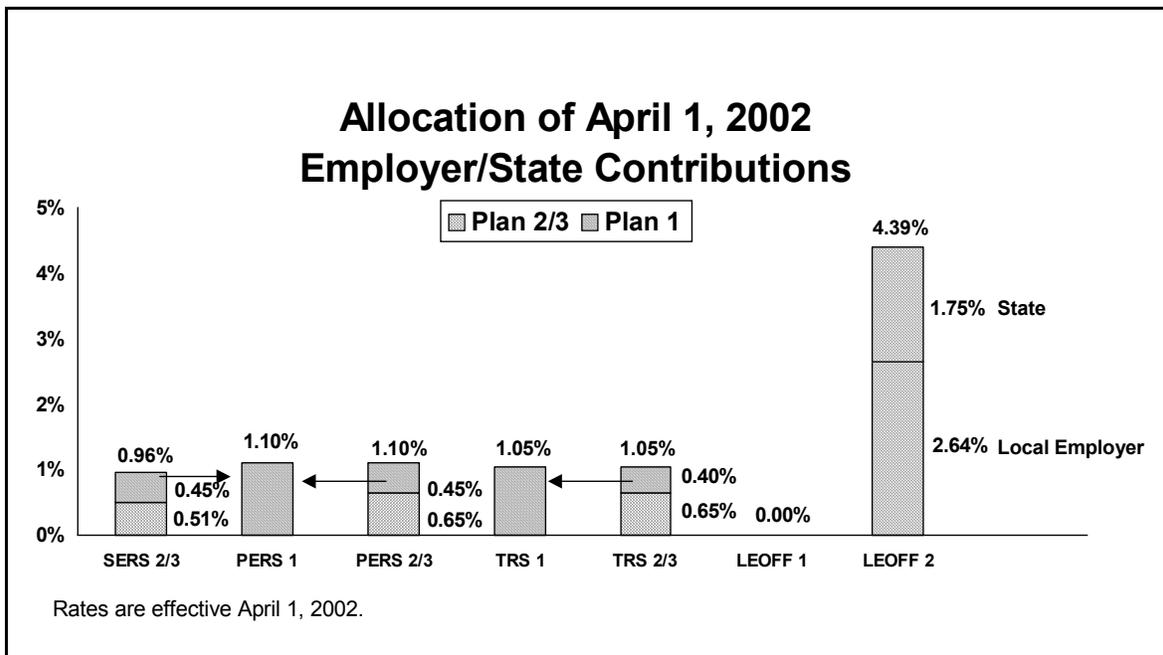
1 LEOFF and WSP rates were implemented July 1, 2000.

2 TRS and SERS rates were implemented September 1, 2001.

Allocation of Employer Contributions

Employees in the PERS, TRS and SERS systems contribute different amounts depending on whether they are members of Plan 1 or 2/3. The employers, however, contribute at the same rate regardless of which plan the employee is a member.

All of the money employees contribute goes into the plan fund in which they are members. The same is not true of all employer contributions. A portion of contributions from Plan 2/3 employers is distributed to the Plan 1 funds. This funding is targeted toward amortizing the PERS/TRS 1 unfunded liabilities by the year 2024. More detailed information on liabilities and funding issues is contained in the funding section.



Benefits

Summary of Financial Activity

Contributions paid into the retirement funds are one aspect of the actuarial valuation. The monthly benefits paid out of the funds are another component. In this section, the cost of benefits is shown for each plan within the framework of their annual cash-flow. Also included is information specific to cost-of-living adjustments in the Plan 1 tier. When applicable, the calculation of gain-sharing increases the Uniform and minimum COLA amounts.

The table below provides an overview of the retirement systems' cash-flow during the 2001 valuation year. The left side of the table shows the contributions made to the systems by members and employers. The center column reflects the dollar amount of investment return on contributions and assets. On the right-hand side, money leaving the retirement systems is depicted under the heading of "Benefits."

2001 Cash Flow in the Retirement Systems

	Beginning Fund Balance (at Market)	Contributions (+)		Investment Income and Misc. (+)	Benefits (-)		Ending Fund Balance (at Market)
		Employees	Employers & State		To Annuitant	Refund of Employee Contributions & Expenses ¹	
PERS 1	\$ 10,744	\$ 52	\$ 119	\$ (1,021)	\$ 515	\$ 6	9,373
PERS 2	10,392	74	75	(1,021)	41	36	9,443
TRS 1	9,805	69	169	(1,174)	638	246 ²	7,985
TRS 2/3	3,397	13	87	(435)	9	9	3,045
SERS 2/3	1,790	9	17	(116)	1	470	1,230
LEOFF 1	5,260	0	0	(499)	183	0	4,578
LEOFF 2	2,378	38	38	(236)	2	6	2,210
WSP	688	1	0	(66)	16	0	608

¹ Includes transfers to Plan 3 Defined Contribution Plan.

² Refunds of employee contributions include withdrawn annuities at retirement.

During 2001, the Plan 1 systems paid out substantially more in benefits than the Plan 2/3 systems. This is characteristic of older plans, where a large number of members have had the opportunity to complete careers of 25 to 30 years before becoming eligible for retirement.

The Plan 2/3 systems have smaller balances and pay out far less money in benefits. Having been created less than 25 years ago, they are considered relatively young by pension system standards. At this point, fewer Plan 2/3 members are eligible to retire than Plan 1 members. Those members that do retire have

earned less service credit and have smaller salaries. As a result, their benefits tend to be lower than Plan 1 benefits. (The Membership Section provides more details about average benefit amounts.)

COLAs in PERS/TRS 1 were granted ad-hoc, meaning the Legislature approved one-time increases as it deemed appropriate without making a commitment to future increases.

Plan 1 Cost-of-living Benefits

Annual increases to benefits (known as cost-of-living adjustments or COLAs) are a relatively recent addition to PERS 1 and TRS 1 benefits. Unlike other systems administered by the state, original provisions of PERS 1 and TRS 1 did not include a mechanism for regularly increasing benefits after members retired.

This situation changed in 1989 with the enactment of the Plan 1 Age-65 COLA. Six years later, the Uniform COLA superceded the Age-65 COLA with a new benefit design and eligibility requirements. The majority of retirees are, or will become, eligible for the Uniform COLA. A very small number of retirees receive post-retirement increases through other COLA designs.

PERS/TRS 1 Cost-of-Living Adjustments			
COLA Type	Retirees Receiving¹	Increase	Eligibility
Uniform	59,035	A flat amount which increases 3% a year. Annual increase is multiplied by member's years of service.	Age 66 or older and retired one year.
Minimum Benefit	867	Equal to Uniform COLA.	Age 65 or younger; and earned benefit is less than \$29.44 per month/year service, (as of 7/1/01.)
Gain-Sharing	59,902	Biennial increase in the Uniform COLA contingent on extraordinary investment returns.	Receiving the Uniform COLA or Minimum Benefit.
Benefit Payment Option	235	At retirement, member may elect an actuarially reduced initial benefit which increases up to 3% annually based on increases in the CPI.	Members retired after 1990.
Age-65	45	Annual increase of up to 3%, based on increase in the CPI.	Retirees whose age-65 retirement benefit purchasing power is reduced to less than 60%, as determined by increases in the Consumer Price Index.

¹2001 Valuation Data

Plan 1 retirees age-65 or younger who had earned a benefit less than \$29.44 per month per year of service in 2001, were eligible to receive a benefit increase under minimum benefit provisions. The minimum benefit provides members who qualify for low monthly benefits with a guaranteed level of retirement income. Increases in the minimum benefit match those for the Uniform COLA. After a minimum benefit recipient reaches age-66, they are counted as Uniform COLA recipients.

The Uniform COLA and Minimum Benefit were both modified in 1998 with a feature known as "gain-sharing." This feature provides a permanent increase to the amount of the Uniform and Minimum Benefit COLAs when certain conditions regarding investment return are met.

Uniform COLA Recipients

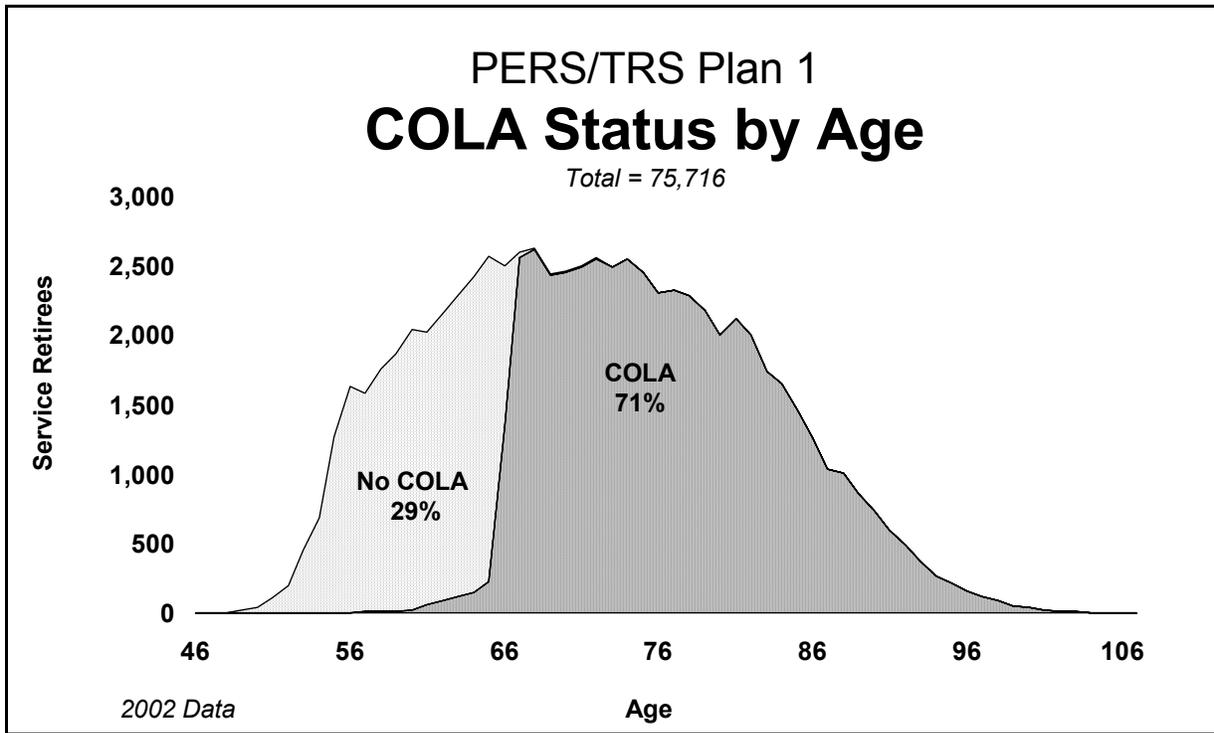
The Uniform COLA is a flat amount per month per year of service. In statutory language it is referred to as the "annual increase amount." This amount grows by 3% each year.

The increase is payable to:

- Retirees age-66 or older who have been retired at least one year; and
- Retirees less than age-66 who are eligible for the minimum benefit.

Statistics regarding the amount of increases and who receives them are collected and analyzed by the Actuary's Office each year. The table below shows characteristics of current Uniform and Minimum COLA recipients.

PERS/TRS 1 Uniform and Minimum COLA Recipients		
<i>(as of 7/1/02)</i>		
	PERS 1	TRS 1
Recipients	40,203	20,546
Increase in Uniform COLA Benefits	\$ 10,597,104	\$ 6,927,295
Averages:		
Current Age	78	77
Age at Retirement	63	61
Year of Retirement	1987	1986
Monthly Benefit per YOS	\$ 44	\$ 48
Monthly Benefit	\$ 895	\$ 1,203
Years of Service	19	25
Years Retired	15	16



Gain-Sharing Distributions

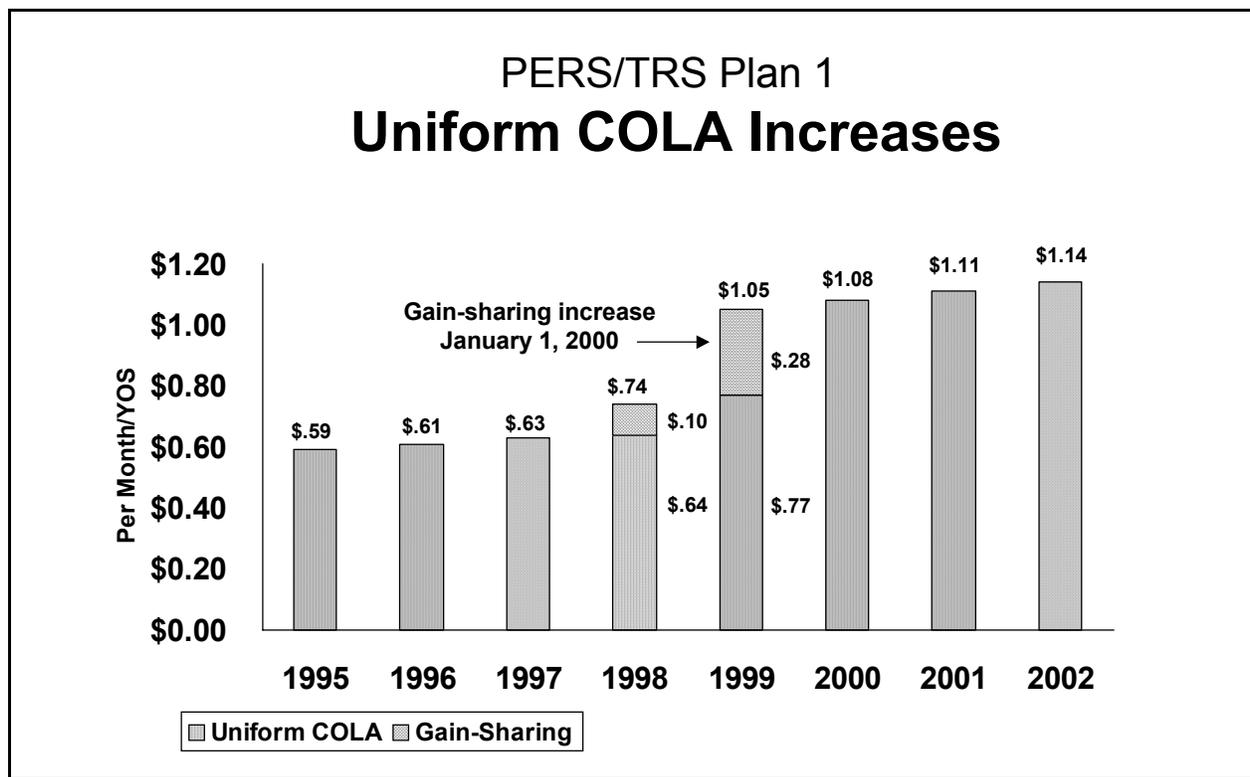
Gain-sharing is a mechanism that increases benefits in PERS 1, TRS 1 and all the Plans 3. These increases are not automatic, but contingent on extraordinary investment return. In reference to gain-sharing, extraordinary returns occur when the funds average investment gains more than 10% for the previous four-year period.

When the previous four-year average exceeds 10%, a calculation is performed to determine the amount of extraordinary gains that will be distributed to eligible members. Gain-sharing calculations are made once each biennium with distributions occurring in January of even-numbered years.

Gain-sharing for PERS/TRS 1

As implemented for PERS/TRS 1, gain-sharing divides extraordinary investment gains between three sectors of retirement funding. When four-year average gains are over 10%, half of the amount over 10% is used to permanently increase the Uniform COLA. The other half is used to amortize unfunded liabilities ahead of schedule. All other gains act to reduce future employer contribution rates, and offset losses in other years.

PERS/TRS 1 members benefit from gain-sharing even if they are not yet retired because each distribution permanently boosts the Uniform COLA amount. If no additional extraordinary gains were realized by the retirement funds, future COLAs will still be higher because of past gains. The following graph demonstrates the effect past gain-sharing has had on the Uniform COLA.



Gain-sharing for TRS 3 Members

In the Plan 3 systems, the same 10% rate of return is used to determine when extraordinary returns have occurred. A second calculation is then made to determine the amount of gains to be distributed.

First, Plan 3 members' service is divided by all system members' service. This produces the percentage of Plan 2/3 retirement funds which can be attributed to Plan 3 member service. The Plan 3 percentage is then multiplied by the dollar amount of gains over 10%.

In the Plans 3, active, retired and term-vested members are eligible for gain-sharing distributions. Distributions are a lump sum that is deposited directly into members' defined contribution accounts. Only those members who are eligible at the time of the calculation receive gain-sharing payments.

In the following table note that the total amount of earnings earmarked for distribution is much larger in the Plans 1, than TRS 3. This is because the Plan 1 funds are much larger. When a gain-sharing percentage is applied to the asset value, the result is a larger product.

All members of PERS/TRS 1 will see an increase in the Uniform COLA amount because of gain-sharing. The number of members shown below is equal to those who were retired at the time of the distribution.

Summary of Gain-Sharing Statistics		
<i>Dollars in Millions</i>	PERS/TRS 1	TRS 3
2002 Distribution		
1998-2002 Average Return Over 10%	0%	0%
2000 Distribution		
1996-2000 Average Return Over 10%	6.56%	6.56%
1996-2000 Gain-sharing Total	\$1,268	\$73
Purchase Benefit Increase	\$634	\$73
Shorten UAAL Amortization Period	\$634	-
Members Receiving Distribution	60,052	35,529
1998 Distribution		
1993-1997 Average Return Over 10%	3.70%	3.70%
1993-1997 Gain-sharing Total	\$580	\$28
Purchase Benefit Increase	\$290	\$28
Shorten UAAL Amortization Period	\$290	-
Members Receiving Distribution	59,470	27,243

Funding Status

Overview

The goal of pension funding is to accumulate enough money during a member's working career to pay retirement benefits after the member retires. Measurements of funding status indicate how well a retirement plan is accomplishing that goal. There are two standard indicators of funding status: the funding ratio and the existence of an unfunded liability.

Neither the funding ratio nor the unfunded liability are used in the calculation of contribution rates, but are valuable in other ways. They are used for comparison with other systems and for monitoring the progress of funding over time. Both measure the benefit obligations, or liabilities, of a plan against its assets. This section details the types and cost of benefits members are expected to earn. The next section addresses system assets.

The Calculation of Liabilities

Liabilities accrue almost entirely from retirement, death or disability benefits. Members who terminate employment before becoming eligible for retirement add little to total system liabilities. The challenge of projecting liabilities lies in accurately predicting the number of members who will qualify for benefits and the total cost of benefits they will become eligible to receive.

The calculation of liabilities is complex. It is based on benefits described in statute and uses actuarial methods; demographic assumptions developed from past experience; economic assumptions adopted by

the PFC; and data provided by DRS. These components are entered into a mathematical model which projects the cost of future benefits.

Liabilities can be represented several different ways, depending on how member salaries and service credit are interpreted. In the Washington retirement systems, the Present Value of Credited Projected Benefits (CPB) is used in determining the funding ratio. This expresses the cost of future retirement benefits in today's dollars. It uses the salaries members are projected to earn in the future, but only the amount of service members have earned to date. An unfunded liability measures the fund's assets against the benefits earned through the valuation year.

Funding Ratios

A funding ratio represents the percent of benefits members have earned that can be paid by current assets. It is determined by dividing the valuation assets by the CPB. If adequate contributions are made from a plan's inception and experience matches assumptions, funding status is maintained at or above 100%. However, assumptions are developed to predict experience over a long period of time. Experience in any one year is almost certain to be different. Thus funding status can be expected to vary moderately from year to year. Funding ratios are most useful in tracking funding status over a series of years.

2001 Funding Status Summary				
<i>(Dollars in Millions)</i>	Credited Projected Benefits	Valuation Assets	Unfunded Liability (Surplus)	Funding Ratio
PERS 1	\$ 11,291	\$ 10,990	\$ 301	97%
PERS 2	6,158	11,032	(4,874)	179%
TRS 1	9,320	9,342	(22)	100%
TRS 2/3	1,797	3,547	(1,750)	197%
SERS 2/3	747	1,472	(724)	197%
LEOFF 1	4,160	5,369	(1,209)	129%
LEOFF 2	1,668	2,576	(907)	154%
WSP	483	712	(229)	147%
Total	\$ 35,624	\$ 45,038	\$ (9,415)	126%

Young benefit plans, like the 2/3 tiers, often have funding ratios greater than 100%. Contributions are being collected at a percent of pay, which over the course of the members' working career is projected to pay for benefits. At this point in time however, members are not near enough to retirement to have created a large liability. As these plans mature and their members draw closer to retirement, the funding ratio will decline toward 100%.

Unfunded Liabilities

All plans created since 1977 are required by law to collect contributions at a rate that will fully fund benefits. This requirement applies to all Plans 2 and 3. Full funding is achieved by biennial adjustment of

contribution rates to levels sufficient to fund the benefits currently provided in statute and requiring any new benefits enacted be accompanied by sufficient increases in contributions.

An unfunded liability occurs when a plan's assets total less than its benefit liabilities. The unfunded liability number represents the dollar value of earned benefits not funded by current assets.

2001 Credited Projected Benefits					
<i>(Dollars in Millions)</i>	PERS		TRS		SERS
	<i>Plan 1</i>	<i>Plan 2</i>	<i>Plan 1</i>	<i>Plan 2/3</i>	<i>Plan 2/3</i>
<u>Active Members:</u>					
Retirement	\$ 3,819	\$ 4,403	\$ 3,077	\$ 1,462	\$ 613
Termination	25	218	21	54	56
Death	27	34	14	18	6
Disability	38	46	13	2	5
Refund on Termination	15	153	1	5	12
Refund on Death	31	73	19	7	5
Portability	8	14	9	2	2
Uniform COLA	320	–	250	–	–
<i>Total Active</i>	\$ 4,282	\$ 4,940	\$ 3,406	\$ 1,549	\$ 699
<u>Inactive Members:</u>					
Terminated	\$ 186	\$ 612	\$ 214	\$ 149	\$ 33
Service Retirees	5,561	549	4,713	93	14
Disability Retirees	104	35	90	3	1
Survivors	326	20	181	3	0
Uniform COLA	833	–	717	–	–
<i>Total Inactive</i>	\$ 7,009	\$ 1,218	\$ 5,914	\$ 248	\$ 48
<i>Grand Total</i>	\$ 11,291	\$ 6,158	\$ 9,320	\$ 1,797	\$ 747

2001 ACTUARIAL VALUATION REPORT

2001 Credited Projected Benefits			
<i>(Dollars in Millions)</i>			
	LEOFF		WSP
	<i>Plan 1</i>	<i>Plan 2</i>	
Active Members:			
Retirement	\$ 402	\$ 1,487	\$ 183
Termination	2	42	1
Death	5	4	2
Disability	243	2	0
Refund on Termination	0	38	1
Refund on Death	2	22	1
Portability	0	2	0
Uniform COLA	-	-	-
Total Active	\$ 655	\$ 1,597	\$ 188
Inactive Members:			
Terminated	\$ 15	\$ 39	\$ 2
Service Retirees	1,174	29	278
Disability Retirees	1,980	2	1
Survivors	336	1	13
Uniform COLA	-	-	-
Total Inactive	\$ 3,505	\$ 71	\$ 295
Grand Total	\$ 4,160	\$ 1,668	\$ 483

Several other values are useful for funding status. When assets exceed the present value of Fully Projected Benefits, funding stops. This has occurred with the two plans showing surpluses below.

2001 Present Value of Fully Projected Benefits			
<i>(Dollars in Millions)</i>			
	Fully Projected Benefits	Valuation Assets	Unfunded Liability (surplus)
PERS 1	\$ 12,244	\$ 10,990	\$ 1,254
PERS 2	12,428	11,032	1,397
TRS 1	10,050	9,342	709
TRS 2/3	4,024	3,547	477
SERS 2/3	1,610	1,472	139
LEOFF 1	4,244	5,369	(1,125)
LEOFF 2	3,652	2,576	1,076
WSP	655	712	(57)
Total	\$ 48,907	\$ 45,038	\$ 3,869

Below we show the amount in Plan 1 that is being amortized in Plan 1 under the current funding method. For Plan 2 the Entry-Age Liability is shown because this is the approximate amount of assets expected, absent gains and losses, plan changes and/or assumption changes. When the assets are more (less) than this amount the contribution rates will be less (more) than the long term entry age rate.

<i>(Dollars in Millions)</i>	2001 Entry-Age Liability		
	Entry-Age Liability¹	Valuation Assets	Unfunded Liability (surplus)
PERS 1	\$ 11,850	\$ 10,990	\$ 860
PERS 2	7,655	11,032	(3,376)
TRS 1	9,742	9,342	400
TRS 2/3	2,148	3,547	(1,399)
SERS 2/3	959	1,472	(513)
LEOFF 1	4,217	5,369	(1,152)
LEOFF 2	1,839	2,576	(736)
WSP	502	712	(210)
Total	\$ 38,913	\$ 45,038	\$ (6,126)

¹ For Plan 1 this is the amount being amortized under the funding method.



Retirement System Assets

Overview

Each retirement system maintains its own separate asset fund, from which benefits are paid. For investment purposes, however, these funds are combined into one fund known as the Co-mingled Trust Fund (CTF). Individual funds own a proportionate share of the CTF, much as individuals own shares in a mutual fund.

Assets are managed and invested by the State Investment Board (SIB.) The 15-member board is comprised of five retirement system members; one legislator each from the House and Senate; the State Treasurer; and the directors of the Department of Labor and Industries and DRS. Five non-voting members, each with experience in the field of investments, are appointed by the board.

The Board directs the work of an executive director and chief investment officer in investing retirement funds and maintaining the records of these activities.

Fund investments are subject to Board-approved guidelines and state statutes regarding the investment of public funds. A key element of these guidelines is the "prudent man" standard. Investments shall be made with the same level of care a prudent person, familiar with investment matters, would use.

Valuing Fund Assets

The value of retirement system assets is always in flux. Just as the stock market registers gains and losses on a daily basis, the value of retirement assets also rises and falls. Assets which are market valued

reflect their worth on a single date. The market value of a fund is considered a volatile measure because it may rise or fall dramatically from day to day. Dramatic fluctuations in the value of the retirement funds can trigger equally dramatic fluctuations in contribution rates. This is not desirable when the goal is to develop stable rates over several years.

To value assets in a less volatile manner, a "smoothing" technique is used in the contribution rate-setting process. Instead of recognizing the results of gains or losses each year, they are recognized at 25% over the next four years. Each year annual returns are overlapped with other years' returns to remove short-term impacts. **Valuation assets** is the specific term used to describe assets which have been calculated in this manner.

Investment gains and losses are the amount of earnings over or under the rate of return assumption used in calculating contribution rates. Currently that rate is 8% for all systems. If a fund realizes a return of 10%, the gain would be 2%. If investment returns are 5%, the fund posts a loss of 3%.

Allocation of Assets

The holdings of the Washington retirement systems can be divided into eight classes.

Cash: Money held while being transferred between investments or placed temporarily in an interest-bearing account.

U.S. Fixed Income: U.S. Treasury and government bonds; investment-grade corporate bonds; publicly traded mortgage-backed securities; mortgages; asset-backed and convertible securities.

Non-U.S. Fixed Income: Foreign government bonds.

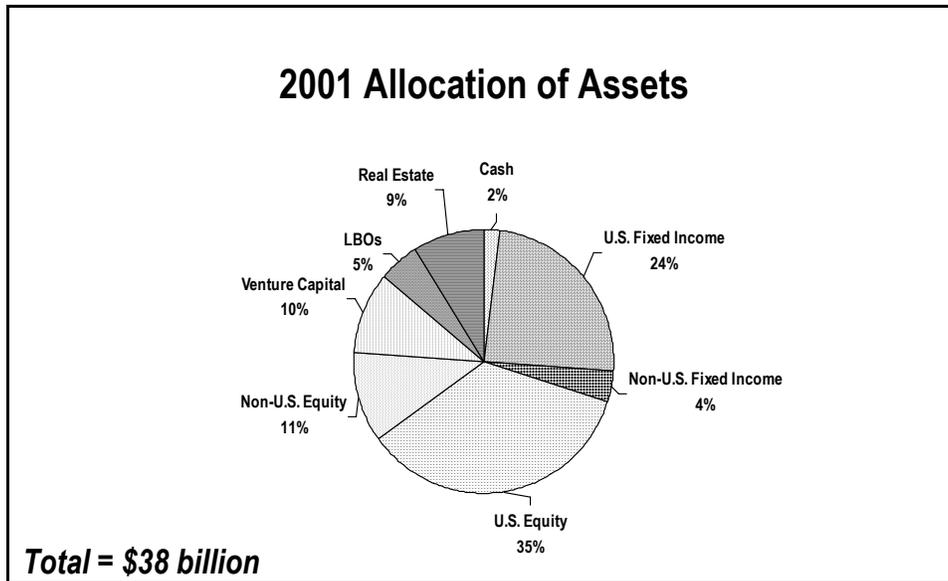
U.S. Equity: Stock in U.S. companies.

Non-U.S. Equity: Stock in foreign companies.

Venture Capital: Equity financing of early expansion and later-stage growth of small businesses.

Leveraged Buy-outs (LBOs): The purchase of all assets or stock in a company using borrowed funds.

Real Estate: Office and retail space; apartments; warehouses; hotels; etc.



Washington Retirement System Assets as of September 30, 2001

<i>(Dollars in Millions)</i>	PERS	TRS	SERS	LEOFF	WSP	Total
Cash	283	189	24	113	10	619
US Fixed Income	4,415	2,582	287	1,590	142	9,016
Non-US Fixed Income	787	460	51	283	25	1,608
US Equity	6,597	3,857	429	2,375	213	13,470
Non-US Equity	2,117	1,238	138	762	68	4,322
Venture Capital	1,935	1,131	126	697	62	3,951
Leveraged Buy-outs	1,000	585	65	360	32	2,043
Real Estate	1,609	941	105	579	52	3,285
Invested Assets	\$ 18,743	\$ 10,983	\$ 1,223	\$ 6,759	\$ 606	\$ 38,314
Receivables	85	52	7	29	2	176
Payables	12	5	0	1	0	19
Market Value Assets	\$ 18,816	\$ 11,030	\$ 1,230	\$ 6,788	\$ 608	\$ 38,470
Valuation Assets	\$ 22,021	\$ 12,889	\$ 1,472	\$ 7,944	\$ 712	\$ 45,038
Ratio	117%	117%	120%	117%	117%	117%

Totals may not agree due to rounding.

Growth of Assets 1997-2001

Growth in the retirement funds comes from two sources, contributions and investment earnings. Over the long-term, investment earnings are expected to provide the largest share of asset growth.

In the 1990's through the end of the century, strong investment returns produced strong growth in assets. With above-expected earnings, it was possible to reduce the contribution rates required to fund the systems. This situation began reversing itself in 2000.

Meanwhile, the value of benefit payments made are increasing at a rate unrelated to investment return. The demographics of membership and average service credit earned, set each Plan in a slightly different funding environment. At present, Plans 2 and 3 have low benefit expenditures compared to revenue received

from contributions and in most years, investment earnings. Assets in these systems will continue to grow in the near term.

In Plans 1, benefit outflows represent a higher percent of annual income than the other Plans. In addition, Plans 1 benefit payments increase by about 10% a year. Eventually, benefit payments will exceed annual contributions and investment income and the funds' total assets will begin to decline.

Economic Components of the Valuation

In determining contribution rates for the state retirement systems, the valuation process does not use the actual economic indicators for that time period. Actual rates for specific time periods can only be determined after the fact. Instead, assumptions about future rates of economic activity are used. The assumptions for the valuations are adopted in statute. They are shown on page 33.

Detail of Asset Growth: Plan 1 and WSP					
<i>(Dollars in Millions)</i>	1997	1998	1999	2000	2001
Beginning Balance	\$ 18,184	\$ 20,868	\$ 23,321	\$ 26,246	\$ 26,497
Contributions	653	654	621	510	410
Earnings on Investment	3,203	3,076	3,668	1,233	(2,759)
Benefit Payments & Refunds	(1,172)	(1,277)	(1,366)	(1,492)	(1,605)
Ending Balance	\$ 20,868	\$ 23,321	\$ 26,246	\$ 26,497	\$ 22,543

Detail of Asset Growth: Plan 2/3					
<i>(Dollars in Millions)</i>	1997	1998	1999	2000	2001
Beginning Balance	\$ 10,297	\$ 12,810	\$ 14,490	\$ 17,330	\$ 17,956
Contributions	741	719	569	406	351
Earnings on Investment	1,884	1,856	2,534	450	(1,807)
Benefit Payments & Refunds ¹	(114)	(895)	(263)	(229)	(572)
Ending Balance	\$ 12,808	\$ 14,490	\$ 17,330	\$ 17,956	\$ 15,927

¹ Includes transfers to Plan 3 Defined Contribution accounts.

In 1998, the Pension Funding Council (PFC) was created specifically to adopt the economic assumptions and contribution rates used in retirement system valuations. It is comprised of six representatives: the directors of the Department of Retirement Systems and Office of Financial Management; and the chair and ranking minority member of the House and Senate fiscal committees.

The PFC is responsible for:

- Adopting changes to economic assumptions and contribution rates; and
- Administering a biennial actuarial audit of the contribution rate-setting valuation.

The economic returns shown on the following page are the actual gains and losses recorded for the past five years. These numbers are used to determine the value of assets and monitor the difference between assumptions and experience.

Salary increases do not include data from members in their early years of employment. These members are excluded because their earnings are boosted annually by "step" and "longevity" increases. Salary growth shown is generated by general cost-of-living increases, job changes, etc.

The Consumer Price Index shown is the Seattle/Tacoma/Bremerton area series for urban wage earners and clerical workers. This series determines COLA increases for almost all system benefits. PERS 1 disability and Judge's Retirement System increases are based on two slightly different series.

Economic Assumptions	
Future Salaries	4.50%
Earnings on Member Contributions	5.50%
Return on Investments	8.00%
Inflation	3.50%
Growth in Membership	
PERS, SERS, LEOFF, WSP	1.25%
TRS	0.90%

	1997	1998	1999	2000	2001
Rate of Return on Market Value Assets¹					
All Systems	17.4%	14.1%	18.4%	0.5%	(9.7)%
Rate of Return on Valuation Assets²					
PERS	17.4%	15.2%	16.8%	10.1%	2.0%
TRS	18.4%	18.1%	14.7%	11.9%	6.7%
SERS	17.4%	15.2%	16.8%	10.1%	2.5%
LEOFF	17.1%	15.3%	16.9%	10.1%	2.1%
WSP	17.5%	15.4%	16.9%	10.1%	2.1%
Salary Increases²					
PERS	3.0%	3.5%	3.7%	4.7%	3.7%
TRS	1.1%	3.9%	1.1%	5.9%	4.5%
SERS	3.0%	3.5%	3.7%	3.1%	3.4%
LEOFF	4.3%	5.0%	3.9%	3.4%	3.0%
WSP	8.6%	6.5%	7.2%	2.9%	2.2%
Seattle/Tacoma/Bremerton CPI - W³					
All Systems	3.1%	2.6%	3.1%	3.7%	3.6%

¹ Calendar year, except for 2001 which is from January 1st to September 30th.

² For 2001 the rates are for the valuation period ending September 30, 2001 (15 months for TRS and 9 months for all other systems). Prior to 2001 the rates are for the 12 month valuation period ending December 31st (June 30th for TRS).

³ Calendar year.

Plan 3 Defined Contribution Accounts

Since 1996, the state has also administered a second form of retirement savings – Plan 3 members' defined contribution (DC) accounts. Initially, these accounts were available only to members of TRS 3. Legislation since 1996 has created Plan 3 tiers for school district employees and public employees. As these plans become operational, the number of members with DC accounts and the amount of money they have invested is expected to increase sharply.

Contributions to DC accounts are made in pre-tax dollars, at a rate that is determined by individual members. There are six contribution options from which to choose. The following table indicates the percent of TRS/SERS 3 members investing at each of the rates available in 2001.

Plan 3 Contribution Rate Options		
Option	Contribution Rate	Active Members ¹
A.	5%	37%
B.	5% until age 35	12%
	6% from age 35-45	
	7.5% age 45 and above	
C.	6% until age 35	14%
	7.5% from age 35-45	
	8.5% age 45 and above	
D.	7%	17%
E.	10%	13%
F.	15%	7%

¹ As of September 1, 2001.

Members may choose how their contributions will be invested, selecting from two basic programs: the Total Allocation Portfolio (TAP) or Self-directed Investments. The TAP fund provides members with an investment option that pays the same rate of return realized by the Co-mingled Trust Fund (CTF). The CTF is managed and invested by the State investment Board to fund the defined benefits provided in Plans 1 and 2.

The Self-directed Investments Program provides a menu of investment funds into which members may direct contributions. Members may not contribute to the TAP and Self-directed programs at the same time, but can retain balances in each.

TRS/SERS Plan 3 Defined Contribution Fund Balances as of September 1, 2001		
Fund	TRS Holdings	SERS Holdings
Long-Horizon Fund	* 1	2%
Mid-Horizon Fund	* 1	3%
Short-Horizon Fund	* 1	1%
International Stock Fund	5%	1%
US Large Stock Fund	12%	5%
Money Market	6%	12%
US Small Stock Fund	6%	2%
US Stock Fund	13%	2%
Bond Market	6%	1%
TAP	51%	71%
Total	100%	100%

¹ Less than 1%.

Legislative

Fiscal Committees

- 1. Appropriate contributions
- 2. Report on retirement bills

Joint Committee on Pension Policy

- 1. Study issues & retirement finances
- 2. Develop policy and recommend actions to the legislature

Office of the State Actuary

- 1. Actuarial studies
- 2. Advise legislature/executive on pension benefits, funding, and SIB investment policy

Pension Funding Council

- 1. Adopt economic and demographic assumptions
- 2. Adopt contribution rates
- 3. Provide for an actuarial audit

Pension Funding Workgroup

- 1. Provides support to the Pension Funding Council
- 2. Seek public input

Executive

Office of Financial Management

- 1. Advise Governor on pension benefit & funding policy

Department of Retirement Systems

- 1. Collect contributions
- 2. Maintain records
- 3. Pay benefits
- 4. Communicate benefits information
- 5. Advise Governor on pension benefits

Employee Retirement Benefits Board

- 1. Recommend options/ Plan 3 DC programs
- 2. Determine admin.charges/ Plan 3 DC programs

State Investment Board

- 1. Invest retirement funds
- 2. Fund accountant